

Pipeline Connectors

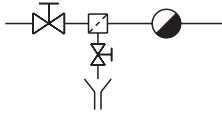
PC3000

Description

The PC3000 range of pipeline connectors are designed for use with two bolt universal swivel connector steam traps. Incorporating one integral piston stop valve it is possible to isolate upstream of the steam trap.

The trap depressurisation port also incorporates a maintainable 40 mesh stainless steel strainer screen to provide trap protection from system dirt and debris. The PC3001 is also fitted with a line drainage valve upstream of the isolation valve.

Available types

Model	Valve connections	P and ID diagram	Flow direction
PC3000	1 x Piston isolation valves 1 x Upstream trap vent valve		Left to right → or ← Right to left

For available options to the pipeline connections see the relevant Data Sheet.

Standards

These products fully comply with the requirements of the European Pressure Equipment Directive 2014/68/EU.

Certification

These products are available with certification to EN 10204 3.1.

Note: All certification/inspection requirements must be stated at the time of order placement. For other certification contact GESTRA.

Sizes and pipe connections

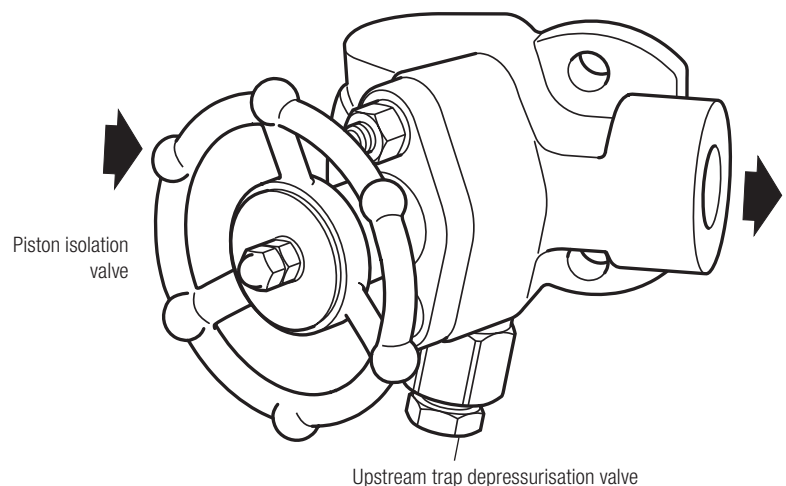
DN15 and DN20 condensate inlet/outlet connections are available with screwed BSP or NPT and as a socket weld connection to ASME B16.11 class 3000. Drainage and venting connections have an M18 thread as standard.

Flanged versions are also available upon request. Please contact GESTRA for further details.

How to order

Example:

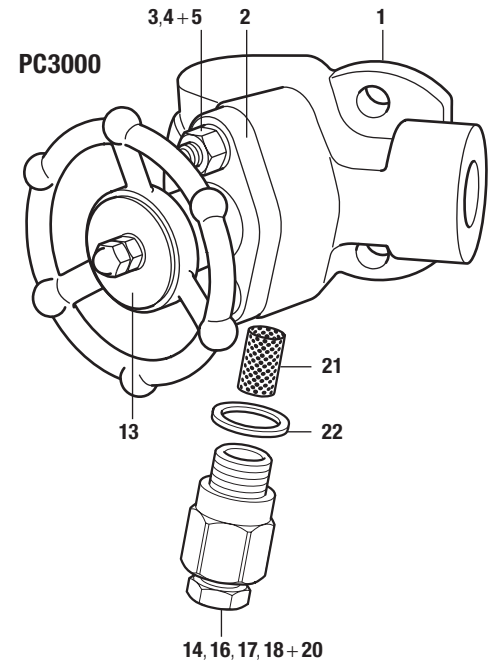
1 off ½" GESTRA PC3000 pipeline connector having right to left flow and socket weld end connections to ASME B 16.11 Class 3000.



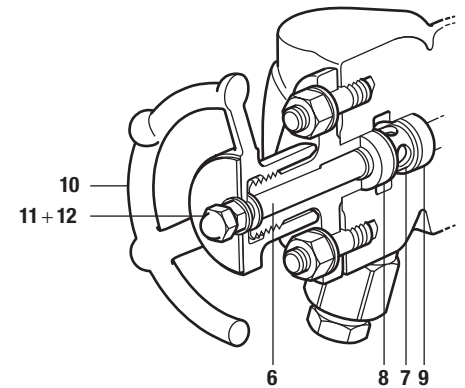
Materials

No.	Part	Material	
1	Pipeline connector body	Austenitic stainless steel	ASTM A182F : 304/304L
2	Bonnet	Carbon steel (Zinc plated)	ASTM A105N/LF2
3	Studs	Steel (plated)	ASTM A193 B7
4	Nuts	Steel (plated)	ASTM A194 2H
5	Washers	Stainless steel	
6	Piston	Stainless steel	AISI 410 : 1.4006
7	Lantern bush	Stainless steel	ASTM A276 : AISI 431
8	Upper ring	Graphite and stainless steel	
9	Lower ring	Graphite and stainless steel	
10	Handwheel	Carbon steel (Zinc plated)	EN 10213 : 1.0619N
11	Handwheel nuts	Stainless steel	
12	Washers	Steel	
13	Name-plate	Stainless steel	
14	Depressurisation valve	Stainless steel	ASTM A182 : 304/304L
16	Valve screw	Stainless steel	ASTM A276 : AISI 431
17	Valve cone	Stainless steel	AISI 440 B
18	Retaining ring	Stainless steel	BS 2056 302 S26
20	Valve gasket	Graphite and stainless steel	
21	Strainer screen	Stainless steel	
22	Depressurisation valve gasket	Graphite	

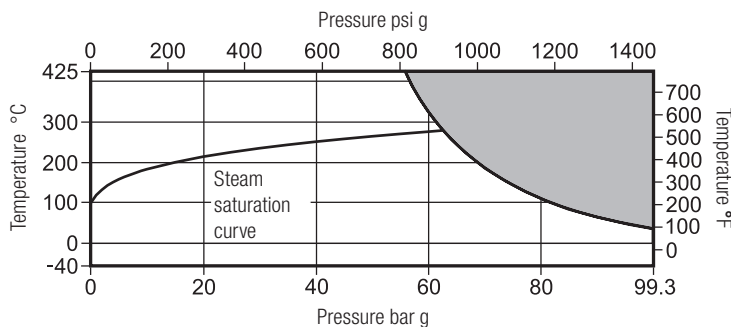
Please note The PC3000 unit is supplied fully assembled; the view is only exploded for ease of part identification.



View showing valve internals



Pressure/temperature limits (ISO 6552)



The product **must not** be used in this region or beyond the parameter of the PMA or TMA of the relative end connection - See notes below.

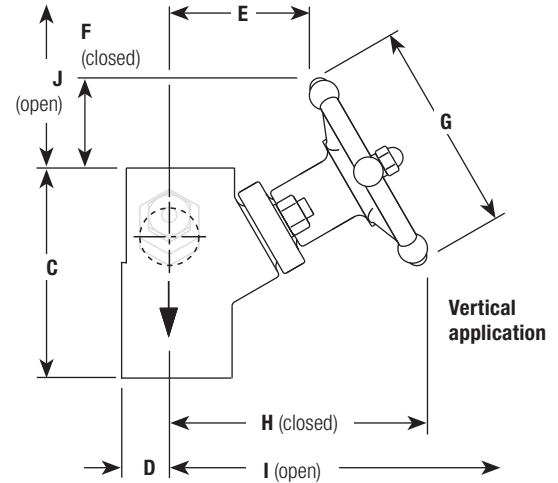
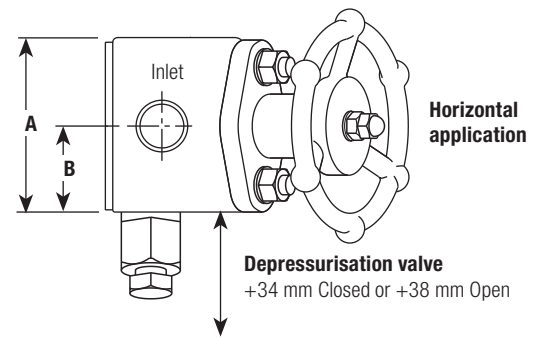
Body design condition		ASME 600	
PMA	Maximum allowable pressure	99.3 bar g @ 38 °C	1 440 psi g @ 100 °F
TMA	Maximum allowable temperature	425 °C @ 56 bar g	797 °F @ 812 psi g
	Minimum allowable temperature	-46 °C	-51 °F
PMO	Maximum operating pressure for saturated steam service	62 bar g @ 279 °C	899 psi g @ 534 °F
TMO	Maximum operating temperature	425 °C @ 56 bar g	797 °F @ 812 psi g
	Minimum operating temperature	-46 °C	-51 °F
Designed for a maximum cold hydraulic test pressure of:		150 bar g	2 175 psi g

Notes:

1. If flange connections are fitted then these will limit the maximum and minimum design conditions of the pipeline connector.
2. The maximum operating limits of the complete assembly will be dictated by the steam trap of choice. Reference the specific steam trap technical information sheet for its 'Pressure/temperature limits'.

Dimensions/weight (approximate)

Units		A	B	C	D	E	F	G	H	I	J	Weight
Metric	mm	72	36	90	25	50	35	90	99	115	50	3.6 kgs
Imperial	inches	2.8"	1.4"	3.5"	1"	2"	1.4"	3.5"	3.9"	4.53"	1.97"	7.9 lbs



Safety information, installation and maintenance

For full details see the Original Installation Instructions supplied with the product.

General information

There are two criteria which must be satisfied to ensure that the swivel connector trap will operate correctly and ensure effective condensate removal:

1. The PC3000 shall be installed with flow in the direction of the arrow. Flow can be horizontal (left to right or right to left), vertical or inclined.
2. The connection face for the swivel connector steam trap must be in the vertical plane unless stated on relevant steam trap Installation and Maintenance Instructions.

After installation it is recommended that the pipeline connector is insulated to minimise radiated heat losses and to protect personnel from burns risk: Please note that some steam trap types should not be insulated.

Depressurisation and line drainage

The PC3000 assembly is supplied fitted with valve(s) which allow depressurisation of the system to enable safe removal and maintenance of the steam trap.

Disposal

This product is recyclable. No ecological hazard is anticipated with the disposal of this product, providing due care is taken.

Spare parts

The spare parts available are shown in heavy outline. Parts drawn in grey line are not supplied as spares. For ease of replacement an extractor tool is available for removing the sealing rings.

Available spares



Sealing ring set	8 and 9
Piston valve assembly	2, 4, 5, 6, 7, 8, 9, 10, 11 and 12
Piston valve sub-assembly	6, 7, 8 and 9
Extractor tool	Not shown
PC depressurisation valve and gasket	14
Strainer screen and gasket (pack of 3)	21

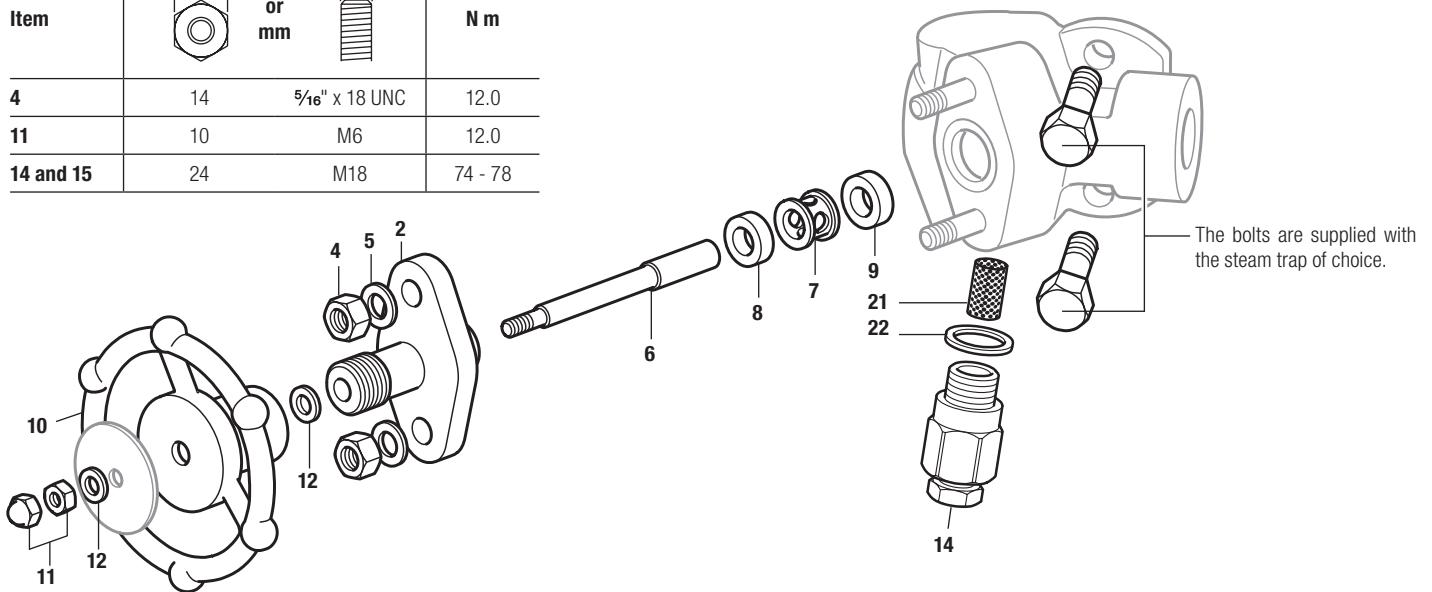
How to order spares

Always order spares by using the description given in the column headed 'Available spares' and state type and size of equipment.

Example: 1 off Sealing ring set for an integral piston valve on a PC3000 pipeline connector having DN15 socket weld connections.

Recommended tightening torques

Item	 or mm		N m
4	14	5/16" x 18 UNC	12.0
11	10	M6	12.0
14 and 15	24	M18	74 - 78



GESTRA AG

Münchener Straße 77, 28215 Bremen, Germany
 Telefon +49 421 3503-0, Telefax +49 421 3503-393
 E-mail info@de.gestra.com, Web www.gestra.com

